PUBLIC SAFETY ELEMENT

GENERAL PLAN

CITY OF HAWTHORNE

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PUBLIC SAFETY AUTHORITY

A. Legislation

Government Code Section 65302.1 requires a Public Safety Element of all city and county general plans as follows:

> "A safety element for the protection of the community from fires and geologic hazards including features necessary for such protection as evacuation routes, peak load water supply requirements, minimum road widths, clearances around structures and geological hazard mapping in areas of known geologic hazard."

B. Guidelines

The California Council on Intergovernmental Relations Guidelines of September, 1973 for the preparation of local general plans states that:

> "The objective of this element is to introduce safety considerations in the planning process in order to reduce loss of life, injuries, damage to property, and economic and social dislocations resulting from fire and dangerous geologic occurrence."

PUBLIC SAFETY POLICY

A. Hazard Recognition

The objective of the Public Safety Element is to require cities and counties to take natural hazards into account in their planning programs. The basic objective is to reduce loss of life, injuries, damage to property, and economic and social dislocations resulting from fire, flood and other geologic disasters. The Public Safety Element for the City of Hawthorne attempts to include the following information:

1. General policy statement that:

   (a) Recognizes safety hazards
   (b) Identifies goals for reducing and eliminating hazards
   (c) Specifies the levels of acceptable risk
   (d) Specifies objectives to be attained in reducing safety hazards as related to existing and new structures
   (e) Sets priorities for the abatement of safety hazards, recognizing the variable frequency and occurrence of hazardous events.

2. Standards and general criteria for land use and circulation relating to:

   (a) Fire prevention and control
   (b) Flood and other geologic hazards

   In addition, the Public Safety Element generally describes the seismic, fire and flooding hazards that currently exist in the City of Hawthorne.

B. Purpose

1. State Mandate

The purpose of the Public Safety Element for the City of Hawthorne is to fulfill the requirement of Section 65302.1 of the Government Code of the State of California which states that a Public Safety Element is a mandated part of the General Plan required by each city and county in the State of California.

2. Hazard Identification

To identify, appraise, and reduce mitigable geologic, fire and inundation hazards to an acceptable level of risk with the overall objective of reducing loss of life, injuries, damage to property, and social-economic dislocations resulting from such natural occurrences.

3. Resource Allocation

To assist in allocation of public resources in the City of Hawthorne and to develop information regarding safety hazards and thereby to develop a systematic approach to the protection of public health, safety and welfare from such hazards. Such information and protective devices are designed for further judicious growth and land use policies in conjunction with previously established City policies contained with the General Plan of the City of Hawthorne.

4. Element Use

The Public Safety Element for the City of Hawthorne is designed to serve as a policy document for use by the Planning, Building, and Public Service Departments, other concerned governmental and private agencies, and individual citizens, on the nature and extent of geologic and other hatural hazards in the City of Hawthorne. For the City Council and Planning Commission, the Public Safety Element and the Seismic Safety Element provide a reference to be used in connection with decisions on private development, capital improvement programs, and other implementation matters within their jurisdiction.

5. Intent

The intent of the Public Safety Element is that it is to be used as a planning device to prepare for the future land use in the City of Hawthorne based upon what is known today, not on what we would like to know in the future.

C. Goals

Goals for the Public Safety Element of the City of Hawthorne are a statement of community-wide desires. The goals presented herein are considered to be the minimum requirement for a safer environment for all the citizens of the City of Hawthorne.

The allocation of resources toward achievement of these goals will be a continuing consideration of the decision makers for an extended period of time. The achievement of these goals can be met in numerous ways, such as: 1.) Provision of adequate medical facilities and proper disaster planning programs; 2.) Informing the citizenry and government employees of their obligations in times of any type of emergency.

Should a severe disaster occur in the City of Hawthorne, the citizenry will be required to make many of the decisions necessary for the saving of life and property. The City Government can help and lead, but it cannot do so without the consent and assistance of its citizens. It is unreasonable to expect that the City Government can do the job alone.

Goals of the Public Safety Element are:

1. Prevention of serious injury and loss of life

   The 1933 Long Beach earthquake and the 1971 Sylmar-San Fernando earthquake taught many lessons in disaster preparedness, building safety, and hazard prevention. The conclusions presented in this element are based, in part, on the knowledge gained from those experiences.

   Personal injury and loss of life in the City of Hawthorne can be reduced in any natural or man-caused disaster such as an earth-

quake, fire or flood. One of the most obvious ways to minimize disaster risk is to require that the design of structures to be erected in the City of Hawthorne will receive minimal or no damage because of a fire, flood or earthquake.

The reduction in the loss of life and the prevention of serious injury is the primary responsibility of the City Government of Hawthorne and should be given highest priority in its Public Safety Program.

2. Prevention of serious structural damage to critical facilities and structures where large numbers of people are apt to congregate at one time.

Hospitals, communication facilities, public facilities, schools and other critical facilities should be designed to continue functioning during and after any natural or man-caused disaster. Action to be taken in regard to these structures will depend upon the "acceptable risk" that a community is willing to accept.

3. Insuring the continuity of vital services and functions

This goal is one of the most important functions of City Government in any disaster simply because there is unlikely to be any other organized source of leadership in a major disaster.

Emergency preparedness should include provisions of food, water, and shelter in disasters, fire control and prevention, flood control measures, emergency medical care, police protection, utility services, and disease prevention measures. Responsiveness to secondary hazards in major disasters may be more important than the actual disaster damage itself. In order to insure the continuity of vital services, "planning ahead" is essential in any Public Safety Program.

4. Education of the Community

This goal is a necessary ingredient to the success of any planning effort in the City of Hawthorne. It is a role to be participated in by school districts, City Government, other public agencies, business firms, the Chamber of Commerce and civic minded citizens who have any interest in the safety program of the City of Hawthorne. The City of Hawthorne must assume part of this responsibility along with all other public agencies concerned with the safety of the public whether a major disaster occurs or not.

PUBLIC SAFETY HAZARDS

A. Fire Hazards

1. Fire Hazard Recognition

Fire long has been recognized as a dangerous threat in urban areas such as the City of Hawthorne. As the population concentrates in increasingly built-up areas, the factors necessary for fire ignition increase as do the chances of a fire spreading rapidly once it starts. The factors of population, material, and energy concentrations in cities mean that loss of life, injury, and property damage from fire are greater in urban areas than in semi-urban and rural areas.

The City of Hawthorne is located in the western portion of the largest urban area on the west coast of the United States. The fire hazards here are not as great as those in the older eastern cities of the United States, but the area does have a propensity for major fires, especially during the long, hot and dry summers. However, several factors in the area minimize the potential number and the degree of damage of fires. The low density of the built-up areas, the quality of fire control agencies, such as the Hawthorne Fire Department and the high standards of fire prevention contribute to making the area comparably safer.

The specific hazards in the City of Hawthorne arise from the urban - residential character of the city. With the exception of a number of vacant lots, the City of Hawthorne has only built-up areas, so the fire hazards are urban rather than those associated with brushlands. Urban fire hazards which can be applied to the City of Hawthorne are considered to be in six general categories as follows:

a. Fire Hazardous Buildings

Fire hazardous buildings in Hawthorne are those which have open stairwells, substandard electrical wiring, or faulty heating systems. When a fire is ignited, it will spread rapidly throughout these types of buildings. A common example of a fire hazardous building is the older, multi-storied hotel converted to permanent residential use, usually for the poor or elderly. These older buildings are also used by some commercial or industrial enterprises. There are no major clusters of this type of building in the City of Hawthorne, but there may be several individual buildings in the City that fit this description.

b. Residential Buildings

Single-family detached houses form a major portion of the housing stock in the City of Hawthorne. Fires occur more frequently in private homes from a variety of causes, but human carelessness is the principal cause. More lives are lost in residential fires than in any other type of fire. One particulatly dangerous hazard in residential fires is the use of untreated wood shingles in roof construction. Windy conditions can spread a fire to other houses where this type of roof is in common use. Other hazards are faulty wiring and heating systems.

c. Multi-Story Buildings

Buildings more than three (3) stories in height present difficult fire control problems. This is not a significant problem in the City of Hawthorne, because it has only two (2) multi-storied structures at the present time. The large number of occupants and their dependence on internal support systems such as water

pressure systems, ventilation systems, and elevator systems increase the potential for disaster. These systems are being given top priority in the construction of the Hawthorne Plaza Project which will contain multi-storied commercial and office structures. Adequate response to multi-storied fires requires special equipment such as helicopters, aerial ladders, smoke ejectors, and a failsafe firefighting communications system to supplement portable radios.

d. Hospitals and Medical Facilities

There are a number of hospitals and medical facilities in the City of Hawthorne. These facilities could present critical fire control problems. Damage to sophisticated medical equipment by fire would threaten the lives of present and future patients. The mentally and physically debilitated person does not normally react during a crisis in a manner that will reduce safety to a minimum hazard. In times of emergency, physical and mental ailments are aggravated by stress and strain and usually medical staffs are not sufficient in numbers to provide adequate aid and guidance.

e. Indoor Public Assembly Facilities

Public assembly facilities are defined as those in which large numbers of people congregate in generally unfamiliar surroundings. There are a number of these facilities in the City of Hawthorne which include schools, theaters, churches, and a variety of recreational structures and facilities. Gatherings of large numbers of people in these facilities create conditions conducive to mass panic in a crisis, such as a fire or earthquake, which increases the number of casualties. The administration of medical aid is made more difficult in these type of crises.

f. Industrial Fire Hazards

Several industries of varying safety intensities are located within the City of Hawthorne. Some of these industrial facilities engage in the processing or utilization of flammable petroleum products, caustic chemical compounds, and other exotic substances, all of which are potential threats to human safety. To minimize these hazards these sites have been designated by the Hawthorne Fire Department as areas that receive special attention both in fire prevention and fire response.

Another potential hazard related to industrial fire hazards in the City of Hawthorne are those created by utility lines, primarily the Southern California Gas Company lines and the Southern California Edison Company overhead electrical power lines. The normal construction of utility lines provides a good degree of safety. However, gas lines do break and power lines do come down causing fires. They cannot be overlooked as fire hazards.

2. Fire Hazards Reduction

Fire hazards in the City of Hawthorne can be minimized by two basic methods. One method involves the reduction of fire starts. Preventive fire control emphasizes safety in the design, maintenance, and use of structures. Proper safety measures can effectively pre-empt the possibility of fire.

The other method of hazards reduction emphasizes the effective response aspect of fire control. Effective response can be assisted by providing necessary access and adequate amounts and pressures of water. Suggested standards for fire protection in urban areas such as the City of Hawthorne that address the aspects of access and fire flow requirements are summarized as follows:

a. Common Vehicular Access

Common vehicular access relates to public and private streets, drives and alleys that are primarily used by the public but are available for emergency purposes.

(1) Single and Two Family Residences:

Minimum roadway (curb to curb) widths of streets should be 36 feet for adequate access for fire equipment. Single entry portions of cul-de-sac streets should be no longer than 500 feet. Cul-de-sac or dead-end street turnarounds should have a minimum radius of 38 feet.

(2) Multiple Family Residences:

(a) All of the building perimeter should be accessible for fire equipment from within 150 feet of a street or driveway.

(b) When buildings are located more than 150 feet from a public street, private driveways of the following minimum widths should be provided for fire equipment.

(i) 20 feet if the first floor of the largest building is less than 5,000 square feet.

(ii) 26 feet if the first floor of the largest building is between 5,000 - 10,000 square feet.

(iii) 28 feet if the first floor area of the largest building is more than 10,000 square feet.

(c) Driveways of not less than 28 feet in width for fire equipment access should be located adjacent to a minimum of one side if buildings are more than 35 feet in height. Driveways should be in an alignment to accommodate the use of fire department aerial apparatus.

(d) Fire equipment access should be provided adjacent to at least two sides of buildings which exceed 150 feet in length or width.

(e) Turnarounds should be required for fire equipment if single entry driveways exceed 200 feet in length.

(3) Condominium, Cluster and Group Developments:

(a) The perimeter of all buildings should be accessible for fire equipment from within 150 feet of a public street or private driveway.

(b) Required access for fire equipment should be a minimum of 30 feet in width on private driveways where no parking is allowed or probable.

(c) Required fire equipment access should be a minimum of 34 feet in width on private driveways where parking on one side is allowed and no parking is allowed or probable on the other side.

(d) Required fire equipment access should be 36 feet in width on private driveways where parking is allowed and probable on both sides.

(e) Turnarounds should be required of all single entry driveways that exceed 200 feet in length.

(f) Intermediate turnarounds should be required at approximately 200 foot intervals for single entry driveways exceeding 300 feet in length and for dual entry driveways exceeding 500 feet in length.

(g) Buildings that are more than 35 feet in height should have driveways located adjacent to a minimum of one side of such buildings. Driveways shall be in an alignment to accommodate the use of fire department

aerial apparatus. Access should be provided adjacent to a minimum of two sides of buildings which exceed 150 feet in length or width.

(h) Pedestrian access should be required to connect vehicular access with required ingresses and egresses to the buildings. Required pedestrian accesses should be designed to prevent sharp turns or obstacles which would hinder the carrying of ground ladders and other hand held fire fighting equipment.

b. Restricted Vehicular Access

Restricted vehicular access refers to access areas for the principal use of fire department vehicles. (It also applies to police, ambulance and other emergency vehicles, but for the purpose of this discussion it shall apply to fire equipment only.)

Restricted access becomes necessary where adequate and reliable vehicular access to buildings is not provided by common vehicular access.

(1) Restricted vehicular access for fire equipment should be a minimum of 25 feet in width. Additional unobstructed increases in width should be required at curves and turns to accommodate the turning requirements of fire department vehicles.

(2) Restricted accesses adjacent to required fire hydrants should be a minimum of 32 feet in width for a linear distance of 30 feet on both sides of the hydrant.

(3) Turnouts for vehicular passing should be required at approximately 200 foot intervals along restricted and single entry accesses, and for multiple-entry restricted accesses which exceed 350 feet in length.

(4) Turnarounds should be required at the end of single-entry restricted accesses of over 150 feet in length. Intermediate turnarounds should be required at approximately 200 foot intervals for restricted single entry accesses exceeding 350 feet in length, and for dual-entry accesses exceeding 500 feet in length.

(5) Necessary curves in a restricted access alignment should maintain a minimum center-line radius of 100 feet.

(6) Necessary right-angle turns and intersections in a restricted access alignment shall maintain a full width of 25 feet on a minimum 38-foot center-line radius.

(7) Restricted access surfaces should not exceed a grade of 15%.

(8) Gates, posts or other barriers suitable to the fire department should be required to be installed at every entrance to restricted accesses.

(9) The entrance to all restricted accesses should be posted with durable signs with the following suggested wording:

"FIRE ACCESS" in 6 inch letters,

"VEHICLES REMOVED AT OWNERS EXPENSE" in letters two inches high.

(10) Assurance of the integrity and reliability of restricted accesses may require the dedication of a fire protection access easement to the City of Hawthorne, if the City adopts standards similar to those herein suggested.

3. Fire Flow Requirements

Fire flow requirements refer to the delivery rates of water that should be maintained to adequately halt and reverse the spread of fire in the City of Hawthorne. The following table lists suggested requirements for the various land uses, the duration requirements

and fire hydrant spacing. These requirements are general in nature and should be modified based on Insurance Services Office requirements for specific local conditions in the City of Hawthorne such as exposure, congestion, building construction and private protection devices:

Land Use Classification	Fire Flow Requirements Gallons Per Minute (GPM)	Duration Requirements Hours	Fire Hydrant Spacing Feet
I. Single Family Dwellings (more than two per acre)			
One Story	1000	2	660
Two Stories	1250	2	660
II. Two Family Dwellings (Duplex)			
One Story	1500	2	330
Two Stories	1750	2	330
III. Limited Multiple Residence 1 and 2 Stories Apartment/Tenements Dormitories Building Size in Square Feet on First Floor			
Less than 5000 square feet	1500	2	300
5000 or more square feet	2000	2	300
10,000 or more " "	2500	2	300
15,000 or more " "	3000	3	300
20,000 or more " "	3500	3	300
IV. Unlimited Residence Three Story and Higher Hotels - High Rise - Etc. Buildings Size in Square Feet on First Floor			
Less than 10,000 square feet	2000	2	300
10,000 or more " "	2500	2	300
15,000 or more " "	3000	3	300
20,000 or more " "	3500	3	300
25,000 or more " "	4000	4	300
30,000 or more " "	4500	5	300

Land Use Classification	Fire Flow Requirements Gallons Per Minute (GPM)	Duration Requirements Hours	Fire Hydrant Spacing Feet
V. Commercial or Industrial Building Size in Square Feet on First Floor			
Less than 10,000 square feet	2000	2	300
10,000 or more " "	2500	2	300
15,000 or more " "	3000	3	300
20,000 or more " "	3500	3	300
25,000 or more " "	4000	4	300
30,000 or more " "	4500	4	300
35,000 or more " "	5000	5	300
VI. Mobilehome Parks			
A. Recreation Park	1500+	2	330
B. Trailer Space Area	500 to 1000	2	660 to 1000
C. Recreational Trailer/ Camper Areas	250	2	800
D. Rec. Buildings, etc.	500	2	800
VII. Schools			
A. Elementary	2000	2	330
B. Intermediate (Jr. High)	2500	2	330
C. Senior High	3000	3	330

4. Fire Hazard Conclusions

a. Brush Fires

The risk from vacant land and brush fire presents no major problem in the City of Hawthorne.

b. Urban Fires

The risk from urban fire within the City of Hawthorne presents no significant problem in most instances because of relatively good access and modern fire fighting equipment. The most frequent urban fires occur in residential structures.

c. Industrial Fires

The possibility of fire spreading from the industrial areas of the City to nearby residential and commercial structures is considered remote since adequate preventive measures such as open spaces, fire preventive materials and equipment and continual monitoring of structures have been enforced.

B. Flood Hazards

The City of Hawthorne is located on the relatively flat, western edge of the Los Angeles Coastal Plain. The City is not located near any major dams or watercourses which minimizes its exposure to inundations from dam failures or stream overflows. In addition, street flooding is not often encountered because of adequate storm drain facilities throughout the City. Although this type of flooding does not pose a significant hazard to public safety in Hawthorne considerable inconvenience can be involved in instances of extended and heavy shower activity.

Flood hazard conclusions:

1. Dams

   The potential for damage from dam failure in the City of Hawthorne is negligible because the City does not lie in the flood plain of any dam.

2. Water Tanks

   The potential for water damage is minimal near and adjacent to the two water storage tanks within the City of Hawthorne.

3. Storm Drains

   Flood damage risk is relative low because of the major storm drains traversing the City of Hawthorne.

4. Drainage Channels

   The City of Hawthorne is not subject to flooding because of overflow along drainage channels.

5. Rainfall

Flooding during heavy and extended rain-shower activity resulting from street surface runoff may occur in certain locations within the City of Hawthorne. Such flooding, however, does not threaten life, cause significant damage to property, or create a major inconvenience.

C. Seismic Hazards

1. Seismic Hazard Reduction

a. Role of the City Government of Hawthorne

Seismic hazard reduction methods are covered in the Seismic Safety Element of the Hawthorne General Plan but certain concepts should be further considered and expanded upon in the upgrading and enforcing of the Uniform Building Code pertaining to seismic risk. The primary role of the City Government of Hawthorne as related to seismic hazards is the protection against loss of life or serious injury to its citizens. To implement this role, the City should adopt and enforce a code for the design and construction of new structures that will protect the citizens, at an acceptable level of risk, against death or serious injury. A structure has performed well in an earthquake, if no one is killed or seriously injured. The structure may be a total loss to the owner, but it is a success from the standpoint of public safety if there is no loss of life or serious injuries. In this concept, the role of government is limited to providing for public safety. Any additional costs required to protect the structure would be at the owner's discretion.

b. Damaged Structures - Costs

An alternative concept is one in which certain governmental agencies provide funds for repair of extensively damaged

structures as a result of an earthquake. This can be accomplished through grants or loans whereby the public has accepted a part of the cost of repairing structures that were underdesigned for the area in which they were built. If the public does not wish to accept this responsibility, it should require that structures be designed to a level that includes protection against significant damage. This approach is based on the assumption that if the public agency does not require appropriate design criteria, then it should be required to pay the cost of repairing structures allowed to be built in more hazardous areas.

c. Critical Structures

It is mandatory that certain critical and important structures, facilities such as hospitals, fire and police stations, and communication centers be required to function at peak efficiency in the hours immediately following a damaging earthquake. This function can be attained by effecting the following criteria:

(1) Building Design

Increased protection for critical structures and facilities in the City of Hawthorne can be accomplished by requiring that they be designed for an earthquake with a high risk of occurrence, and to withstand more intense shaking than non-critical structures and facilities.

(2) Total Design Level

Maximum protection can be accomplished by "design level", which means that buildings, such as hospitals, will not only remain intact, but also be able to provide care for the injured as a result of an earthquake. This "design level" protection not only requires a stronger building,

but requires that greater attention be given to non-structural items such as elevators, lighting fixtures, stability of storage cabinets, etc. This approach emphasizes the usability of the facility after the earthquake.

(3) Public Policy

Increased protection for critical structures and facilities in the City of Hawthorne is a matter of public policy requiring public involvement at the decision stage and the implementation of codes and ordinances adopted by the elected representatives of the people. The design of public schools and hospitals are reviewed by the State Office of Architecture and Construction or the Division of Mines and Geology, but design criteria for all other facilities are regulated by local jurisdictions.

2. Seismic Hazard Conclusions

a. Seismic Activity

The City of Hawthorne is located in a potentially seismically active area. The states of activity of the two faults affecting the City of Hawthorne have been evaluated and described in the Seismic Safety Element of the Hawthorne General Plan.

b. Surface Rupture

Surface rupture from seismic activity and fault movement is not considered a hazard within the City of Hawthorne

c. Ground Shaking

The primary seismic hazard in the City of Hawthorne is strong to severe ground shaking generated by movement of the Newport-Inglewood and San Andreas faults.

d. Liquefaction

Liquefaction is a remote hazard in the extreme southern portion of the City of Hawthorne.

e. Landslides

Landslides are not considered a hazard in the City of Hawthorne.

PUBLIC SAFETY EVALUATION

A. Risk Evaluation

1. CIR Guidelines

The Council on Intergovernmental Relations (CIR) Guidelines of September, 1973 separates risk into three distinct categories:

a. Acceptable Risk - level of risk below which no specific action by government is deemed to be necessary.

b. Unacceptable Risk - level of risk above which specific action by government is deemed to be necessary to protect life and property.

c. Avoidable Risk - risk not necessary to take because individual or public goals can be achieved at the same, or less, total "cost" by other means without taking the risk.

Appropriate risk levels in the City of Hawthorne should be determined with maximum citizen input. In making this determination and evaluation, the appropriate planning response to a potential hazard involves a judgment, either expressed or implicit, of the risk that is acceptable. There is no such thing as a perfectly hazard-free environment. Natural and man-made hazards of some kind and degree are always present. However, efforts can be productively undertaken to try to mitigate the consequences of known hazards.

In the context of the Public Safety Element of the City of Hawthorne, the evaluation of risk should be one of public policy and the appropriate allocation of public resources to mitigate hazards. The planner's responsibility in the City of Hawthorne should be to provide a framework in which a community-wide response to the questions of risk can be meaningful. This approach should be the first of several essential steps in the recognition of the presence of hazards.

Once a public safety hazard has been recognized, considerable effort will be required to evaluate its likely severity, frequency, and the characteristics of the area involved. This evaluation should consider the benefit/cost ratio of reducing the hazard, acknowledgement of the intangibles involved, and its comparison with that of other hazards. The factors of voluntary and involuntary exposure to risk should be considered in reaching a decision.

2. Risk Levels

Because it is the citizens of Hawthorne who both receive and pay for the protection, the choice of the level at which risk becomes "unacceptable" is a matter of citizen input and involvement with the final determination of risk level being made by the City Council.

The following is intended to quantify risk and to present recommendations regarding acceptable risk where appropriate:

a. Fire Hazard

The risk of a wide-spread fire in the City of Hawthorne is negligible. The fire hazard risk is presently acceptable and requires no further governmental action.

b. Flood Hazard

The risk from flooding is acceptable because the City of Hawthorne does not lie in the inundation path of any significant dam. In addition, the City does not fall within the floodplain of any major streamway and flooding from rainfall is mitigated by the extensive major storm drain system throughout the City.

c. Seismic Hazard

The risk from seismic hazards are analyzed in the Seismic Safety Element of the Hawthorne General Plan.

It should be stressed that the above evaluations represent only the recommendations of acceptable risk and that the citizens of Hawthorne should ultimately decide on the level of risk deemed acceptable for each type of hazard.

B. Classification of Critical Facilities

The following table of Classification of Critical Facilities is intended to be used as a guide in evaluating the importance of each critical facility relative to overall Public Safety in terms of fire, inundation, seismic and secondary hazards by the citizenry and government of the City of Hawthorne.

CLASSIFICATION OF CRITICAL FACILITIES

CITY OF HAWTHORNE

	Potential Effect on Loss of Life	Required for Community Functioning
Electrical Sub-Stations		X
Schools	X	
Fire Stations		X
Railroad Lines		X
Aqueducts/Pipelines	X	X
Utility Lines		X
County Buildings	X	
City Buildings	X	
Hospitals	X	X
Water Works		X
Highway Patro/Police Stations		X
Major Highways/Bridges	X	X
Civil Defense Quarters		X
Theaters/Auditoriums and other places of public assembly with over a 100 person capacity	X	

C. Hazard Evaluation Responsibility

The methodology of hazard evaluation responsibility places emphasis on those particular public safety hazards that are generally defined area-wide but apply directly to the City of Hawthorne. Natural and man-made hazards that must be evaluated as a part of individual site investigations are treated with the intent that the results will be used to facilitate the administration of public safety. The relationship and attendant responsibilities between the public and private sector and the evaluation of specific hazards in the City of Hawthorne are shown on the following table:

CITY OF HAWTHORNE

DISTRIBUTION OF RESPONSIBILITY FOR
EVALUATION OF NATURAL AND MAN-MADE HAZARDS

Hazard	Responsible Sector	
	Public	Private
1. Earthquake Fault Rupture:		
a. Evaluation of fault	XXX	
b. Location at site		XX
2. Earthquake ground shaking:		
a. Sources of shaking	XXX	
b. General levels of shaking	XX	X
c. Effects on site		XX
3. Fire Hazard:		
a. Risk of occurrence	XXX	
b. Regional evaluation	XX	X
c. Effects on site		XX
4. Flooding:		
a. Risk of occurrence	XXX	
b. Regional evaluation	XX	X
c. Effects on site		XX
5. Liquefaction, settlement, and subsidence:		
a. Regional evaluation	XX	
b. Effects on site		XX

X = Secondary responsibility
XX = Primary responsiblity
XXX = Primary responsibility with determination of acceptable risk necessary.

The primary responsibility for evaluation of each aspect of a hazard is shown by a "XX" and by a "XXX" if a determination of acceptable risk is involved. Those aspects for which either sector may commonly have a secondary responsibility are indicated by an "X". The intent is to show the distribution of responsibility for evaluation of a hazard; the overall regulatory responsibility of government is not included.

D. Primary and Secondary Hazards

The siesmic hazards discussed in the C.I.R. Guidelines and the Seismic Safety Element of the City of Hawthorne can be grouped as a cause-and-effect classification that is the basis for the order of consideration and evaluation discussed in "C" above. Earthquakes originate as the shock wave generated by movement along an active fault. The 'primary natural hazards' are ground shaking and the potential for ground rupture along the surface trace of the fault. 'Secondary natural hazards' result from the interaction of ground shaking with existing ground instabilities which include liquefaction, settlement, landslides, flooding from water trunk line breaks and fire from fuel transmission line breaks.

The potentially damaging natural hazards discussed above can interact with man-made structures. If a structure is unable to accommodate the natural event, failure will occur. The potential for such failure is termed a structural hazard, and includes not only the structures themselves, but also the potential for damage or injury that could occur as a result of movement of loose or inadequately restrained objects within, on, or adjacent to a structure.

V

PUBLIC SAFETY RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

A. Circulation

The effect of the Public Safety Element upon circulation and transportation in the City of Hawthorne is not considered significant. The principal reason is that seismic, fire and inundation hazards in Hawthorne are not sufficiently critical to meaningfully impact circulation corridors and transportation routes. However, in the event of an earthquake, fire or flood of significant magnitudes the major arteries for transportation such as the '405' freeway and Hawthorne Boulevard could be heavily damaged preventing their use for days or weeks. This could put additional traffic loads on the other major surface streets throughout the City of Hawthorne. Thus, a disaster or emergency plan for the City should focus on lesser used throughway streets in Hawthorne.

B. Housing

The Public Safety Element's effect on housing in the City of Hawthorne is primarily limited to replacement and strengthening of unsafe structures and the requirement that new construction be in conformance with seismic and fire protective requirements of the 1973 Edition of the Uniform Building Code.

C. Land Use

Because of the urban character of the City of Hawthorne and being almost fully developed, land use controls for reducing fire, inundation and seismic hazards should be directed towards and related to actual redesign and design of existing and new structures.

D. Seismic Safety

The Seismic Safety Element of the City of Hawthorne is directly related

to, and, in many instances, is an integral part of the Public Safety Element because of its similar effects, hazard reduction techniques, and disaster planning.

PUBLIC SAFETY POLICY AND IMPLEMENTATION RECOMMENDATIONS

The following represents a summary of Policy and Implementation recommendations of the Public Safety Element of the City of Hawthorne.

A. Policy Recommendations

1. Community Programs

The City of Hawthorne should continue to support community programs that reduce urban fire hazards, including debris, weed and brush removal and control, the use of fire retardant plants in landscaping programs and the promotion of the use of fire retardant construction materials.

2. Elementary School Programs

The City should continue to initiate educational programs on fire hazards in the elementary schools, including the use of displays and demonstrations that expose and educate children to the nature and strength of fire. These programs add a sense of respect to the curiosity of children about fires.

3. Secondary School Programs

The City should continue to support and sponsor exhibits and presentations in secondary schools which demonstrate the more involved aspects of fire such as the major contributors to fire hazards and the relationship of fire to human safety. Parental cooperation and assistance should be encouraged in overall fire education programs.

4. Utility Inspections

The City should expand upon and improve power and gas line inspections through a coordinated effort between the Southern California Edison Company, the Southern California Gas Company and the Hawthorne Fire Prevention Bureau.

5. Community Training

The City should expand upon, improve and support community programs that train volunteers to assist police, fire, and civil defense personnel on how to perform effectively after a natural disaster such as a major earthquake, fire of flood.

6. Information Program

The City should develop an information program to familiarize all of its citizens with the guidelines of the Public Safety Element. The three School Districts, those agencies related to the aged and handicapped, and business and industrial organizations should be encouraged to develop informational and educational programs relative to Public Safety awareness.

B. Implementation Recommendations

1. Education

a. Workshops

The City government of Hawthorne can utilize the Public Safety Element for presentations on fire, flood and seismic hazards at workshop meetings at schools, aged and handicapped agencies, business and industrial organizations, civic groups, and to builders and realtors.

b. Information System

The City can establish an information system utilizing all segments of the community to dispense and receive data on public safety problems, concerns and findings.

c. Other Agencies

The City can encourage State, Federal and other governmental agencies to intensify research on flood, fire and seismic hazards.

2. General Plan

a. Other Elements

The City of Hawthorne needs to relate the findings of the Public Safety Element to the Open Space, Land Use, Circulation, Housing, and Seismic Safety Elements of the General Plan.

b. Element Review

The Public Utility Companies, the Southern Pacific Railroad Company, and all City Departments should continually review the Public Safety Element for determination of its impact on the storage of fuels, transportation facilities, including gas, electricity and communication transmission lines, water tanks and reservoirs, maintenance and station facilities and major distribution and transformation network centers.

3. Ordinances

a. Subdivision and Zoning

The Planning Department and the Planning Commission of the City of Hawthorne should continually review the sub-division and zoning ordinances and advise the City Council on the implications of the Public Safety Element with relation to fire, flood and seismic hazards and make recommendations on desired and required changes in said ordinances.

b. Building and Grading

The Building and Safety and Engineering Departments should continue to review and update building codes, grading ordinances and pertinent administrative procedures for the purpose of mitigating hazards from floods, fire and seismic activity as presented in the Public Safety Element.

4. Emergency Services Program

a. Emergency Services Requirements

It is mandatory that the City of Hawthorne implement the emergency service requirements of the Public Safety Element in case of a declared disaster and coordinate activities of the police, fire, civil defense and volunteers.

b. Disaster Information Programs

The City of Hawthorne should prepare Public Safety disaster information release programs for use in emergencies for the benefit of all its citizens.

5. General Programs for Improving Public Safety

Two major programs need to be adopted by the City of Hawthorne for the implementation of the Public Safety Element which will also apply to the Seismic Safety Element: an Emergency Disaster Plan and a Public Awareness Program.

a. Emergency Disaster Plan

An Emergency Disaster Plan needs to be adopted and implemented to enable the City of Hawthorne to be self-sufficient in the days and weeks following a severe earthquake, fire or flood.

The Emergency Disaster Plan should be required to provide for emergency medical facilities, temporary shelter, emergency communications equipment, and emergency water and food supplies. An earthquake of significant magnitude will severely affect many cities and hundreds of thousands of people, resulting in an over-extension of Federal and State emergency services. It is advisable that the City of Hawthorne should be prepared to serve itself and maintain the continued

function of providing necessary services rather than be dependent upon adequate aid from other agencies and organizations in cases of a major flood, fire or earthquake.

b. Public Awareness

The Hawthorne City government needs to initiate a continual program to increase public awareness of earthquake, fire and inundation safety. The program can be presented as a series of scheduled community meetings and/or seminars. It needs to stress the minimizing of hazards in the home, and precautions to be taken by all citizens after the occurrence of an earthquake, fire or flood.

6. Public Safety Element Update

To make the Public Safety Element a workable guideline in mitigating fire, flood and seismic hazards, the City of Hawthorne must continue the updating and the mechanisms necessary for improving safety standards of the City. An integral part of this process, a monitoring and surveillance system should be established which utilizes all relative information developed by various state and federal agencies, colleges and universities and special interest groups. It is necessary that City personnel work with these agencies, schools and groups to analyze information exchanges of importance and relay pertinent findings to various city departments for consideration. A formal mechanism such as a Public Safety Committee could facilitate this coordination.

A program of a major update of the Public Safety Element should be undertaked every five years by the Planning Commission and City Council of the City of Hawthorne. In the event of a change in the data base caused by a major earthquake, fire, flood or other disaster, it may be advisable to formulate a regional study group to reconsider the Public Safety Element and its implications.